

in Montana by establishing that the locality labels on the specimens read "Mo." which he noted is "our somewhat irrational abbreviation" for Missouri.

(5) The specimen is almost certainly *P. campestris*¹ and most likely was taken at Livingston, Montana.

(6) No change is indicated in the conclusion that the possibility of the occurrence of *Phyciodes batesii* in Mississippi is so remote as not to merit mention on our faunal lists.

LITERATURE CITED

- BURNS, J. M., 1964. Evolution in Skipper Butterflies of the genus *Erynnis*. Univ. of Calif. Publ. Entom., 37, 214 pp.
- ELROD, M. J., 1906. The Butterflies of Montana. Univ. Mont. Bull., 10, 174 pp.
- HALL, A., 1930. A Monographic Revision of the genus *Phyciodes* Hübn. Suppl. to Bull. Hill Mus., Vol. II-IV, 206 pp., London.
- MATHER, B., and K. MATHER, 1958. The Butterflies of Mississippi. Tulane Stud. Zool., 6(2): 63-109.
- DOS PASSOS, C. F., 1964. A Synonymic List of the Nearctic Rhopalocera. Lepid. Soc., Memoir No. 1, 145 pp.

¹ On 24 September 1965, while I was visiting at the British Museum, London, Mr. Riley kindly showed me the series of *P. batesii* in that collection. We noted that the Godman specimen was no longer there. Further examination disclosed that the specimen had been moved to the portion of the collection with *P. campestris*. The Godman specimen closely resembles other *P. campestris* from Montana, which are in the British Museum.

A NEW SPECIES OF *GLAUCINA* (GEOMETRIDAE) FROM TEXAS

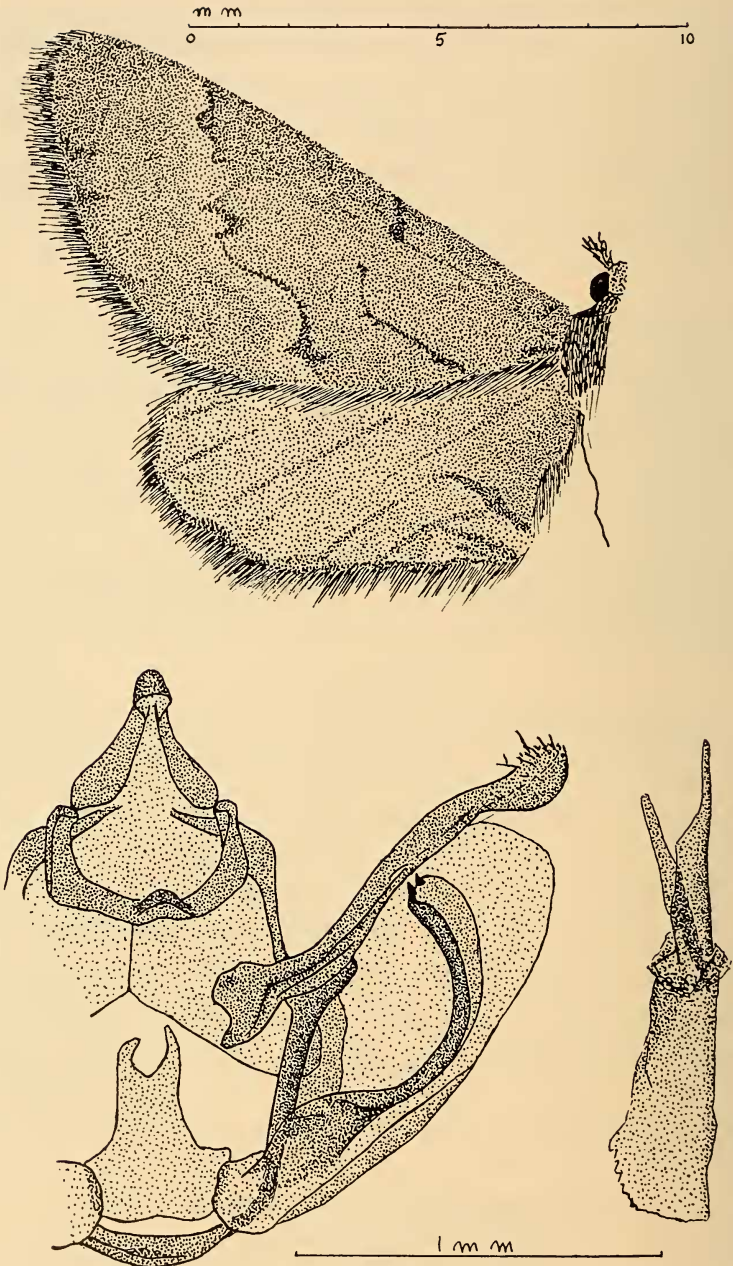
A. BLANCHARD

3023 Underwood, Houston, Texas

While making genitalic slides of male *Glaucina* specimens, I discovered two which did not agree with any described by F. H. Rindge in his revision of the genus (1959). As the color of the wings of these two specimens is of a more neutral, ashy gray than is the case for most *Glaucina*, and paying attention to the course of the t. p. line, it was easy to select five more male specimens which proved to have similar genitalia. Dr. Rindge, to whom I submitted a sketch of the male genitalia, confirmed my impression that I was dealing with a new species. A description of it follows:

Glaucina mayelisaria A. Blanchard, new species

MALE: *Head*: Vertex gray, front rough scaled, gray except dorsolaterally swollen areas covered with black scales; dorsolateral areas more swollen where they meet at top of front than at midlevel of front where they diverge almost reaching eyes, faint indication of ridges laterally along the eyes in lower half of front; palpi long, extending beyond front about half of diameter of eyes, with blackish scaling.



Glaucina mayelisaria A. Blanchard. (upper) Wing pattern of holotype, with lines slightly emphasized. (lower) Male genitalia, ventral aspect with valvae spread, aedeagus removed and shown at right (prep. A. B. no. 215, in author's collection).

Thorax: Above, gray, concolorous with wings; legs and thorax below mottled whitish and blackish; foretibia darker; all tarsi black, narrowly bordered distally with white.

Abdomen: Concolorous with thorax, above and below.

Wings: Upper surface: Forewings, ground color ashy gray, resulting from mixture of light gray and blackish scales, all white-tipped, no tawny or brownish tint; darker in outer third and along costa; t. a. line, sometimes obsolete, generally obscure in upper half, particularly through cell, marked on costa approximately one-third of distance from base, arising again on Cu, two-fifths of distance from base to margin, swinging basad by a well-rounded curve to fold, then straight to inner margin which it reaches barely one-fifth of distance from base; t. p. line, varying from faint in its upper half, mainly facing cell, to well marked from costa to inner margin, in general course parallel to outer margin, dentate on most veins, incurved between veins, most noticeably in fold; t. p. line followed by lighter area; no discal dot; no s. t. line; terminal line fine and black; fringe concolorous with darker portions of wing, except in lower half, appreciably lighter. Hindwings, concolorous, lighter except along the anal margin; maculation absent except a short but prominent fraction of the postdiscal line above anal angle; terminal line and fringe as on forewings. *Under surface:* Forewings pale gray, darker along costa and near apex. Hindwings light gray, with heavy spattering of black specks, producing from a distance same shade of gray as forewings; both wings without maculation except for narrow terminal line; fringes as above.

Length of forewing: 11 to 12 mm.

Male genitalia: Uncus triangular in outline, width of base about equal to length, apex curved ventrally, terminally resembling a flattened hood; gnathos with small median enlargement; valvae broad, rounded apically, indented at junction of costa; costa of even width to apex, slightly sigmoid, dorsally concave in proximal half, ventrally concave in distal half, no median swelling, the upper surface of apex beset with slightly curved, spine-like hairs; sacculus arm long and narrow, of even width, curved in quarter circle so that its tip almost touches costa; tip of sacculus arm provided with two short, thick, heavily sclerotized spines; base of valve with heavily sclerotized band, widened at junction with costa, only slightly widened at junction with sacculus arm; juxta connecting sclerotized sacculus bases; aedeagus, about same length as costal arm, much pointed at distal end and only a half cylinder in its distal two-fifths, proximal half much thicker; vesica armed with single cornutus half as long as aedeagus.

FEMALE: unknown

Holotype, male: Big Bend National Park, Government Spring, Sept. 29, 1965, deposited in the American Museum of Natural History; six paratypes, also collected in the brushy area extending north and west at the foot of the Chisos Mountains, at an altitude of 3,000 to 4,000 feet: Oak Spring Aug. 5, 1964, deposited in the U. S. Nat. Mus.; Oak Spring Oct. 4, 1965, deposited in the Los Angeles Co. Mus.; Oak Spring Oct. 4, 1965, one specimen; Oak Spring Oct. 6, 1965, two specimens; Dugout Wells Sept. 28, 1965, one specimen; the last four paratypes are in the author's collection.

It seems that this species would fit best in Rindge's Group IV, although the key to species groups based on male genitalia limits group IV to species with a straight sacculus arm. Like all species in Group IV, its front presents dorsolaterally swollen areas; but, *infumataria* is the only

other species in this group with t. a. and t. p. lines which do not join to form loops.

The aedeagus also seems quite peculiar. I have found it quite difficult to remove without damaging the manica and pulling the juxta as well.

The species is named for my wife, who is a constant and devoted companion on my entomological collecting trips.

The author wishes to acknowledge with thanks the cooperation and aid of the personnel of Big Bend National Park, particularly Mr. Douglas B. Evans, park naturalist. The author also wishes to thank Dr. F. H. Rindge, American Museum of Natural History, New York, for assistance on this and many other occasions.

LITERATURE CITED

- RINDGE, F. H., 1959. A Revision of *Glaucina*, *Synglochis*, and *Eubarnesia* (Lepidoptera, Geometridae). Bull. Amer. Mus. Nat. Hist., 118: 263-365, plates 23-27.

THE FEMALE OF *GLAUCINA MAYELISARIA* A. BLANCHARD (GEOMETRIDAE)

Among some unmounted specimens recently donated to the American Museum of Natural History by Mr. Blanchard were some *Glaucina*. Included with these were four examples of *mayelisaria* collected by A. and M. E. Blanchard from the following Texas localities: 10 miles north of Van Horn, Culberson County, June 24, 1965, and Oak Spring, Big Bend National Park, June 30, 1965. There were two males from the first locality, and one male, one female from the second. As the female of this species is undescribed, the following descriptive notes will be of interest.

The female of *mayelisaria* is very much like the male in size, color, and pattern. There is slightly more pale scaling basad of the t. a. line and distad of the t. p. line than in the holotype. The length of the forewing is 11 mm.

The female genitalia of this species are very distinctive. The sterigmal area is heavily and extensively sclerotized, with a broad, medially invaginated lamella postvaginalis, bordered by a wide, curving anterior band extending farther cephalad than in any known species of *Glaucina*. The ductus bursae is short, weakly sclerotized, and extends more or less dorsally into the membranous corpus bursae. The latter is ovate and relatively small, and does not have a neck. The signum is small and somewhat poorly defined; it has a transverse, inwardly pointing median ridge. The intersegmental membrane between A_7 and A_8 is not modified.

FREDERICK H. RINDGE, *Department of Entomology, The American Museum of Natural History, New York, N. Y.*